

LISITSYN, S. N.

The repair of damaged steel pipes. Moskva, Gos. izd-vo stroit. lit-ry, 1945. 19 p.
(50-17101)

TS280.L55

Lisitsyn, S. N., jt. au.

ZHURAVLIV, B. A. (Tools for sanitary engineering works) Moskva, Gos. izd-vo lit-
ry po stroit. arkhitekture, 1952. 171 p. (54-18078)

LISITSYN, S. N.

S. D. Dubrovkin and S. N. Lisitsyn, Montazh sanitarno-tekhnicheskikh ustroystv vysootnykh zdaniy (Installing Sanitary-Engineering Units in Tall Buildings,) Press for Literature on Building and Architecture, 25 sheets, illustrated.

The booklet generalizes experience in installing the sanitary-engineering units of tall buildings erected in Moscow, describes new solutions of problems of design, new equipment, and new methods of organization and execution of installation operations; it describes problems of using large block and tackle for the installation of air-conditioning units, dust-collecting systems, and noise-deadening constructions, treats the problems of automatization of all types of sanitary-engineering units, advanced methods used in welding work, the continuous-flow method of preparatory operations in assembly plants, etc.

The booklet is intended for workers of installation organizations and the planning and designing organizations engaged in assembling and planning sanitary-engineering installations.

SO: U-6472, 18 Nov 1954

ZHURAVLEV, B.A.; LISITSYN, S.N.; DUBROVKIN, S.D., inzhener, redaktor;
NEPOMNYASHCHAYA, T.F., redaktor; MEDVEDEV, L.Ya., tekhnicheskiy
redaktor; SMOL'YAKOVA, M.V., tekhnicheskiy redaktor.

[Handbook for a master plumber] Spravochnik master-santekhnika.
Moskva, Gos.izd-vo lit-ry po stroitel'stvu arkhitektury, 1955.
359 p. (MLRA 8:10)

(Plumbing)

LISITSIN, S.N., inzh.; FISHMAN, N.Ya., inzh.; MAZO, A.V., inzh., red.;
~~PEROVA, V.V., red.izd-va; NAGISHKINA, T.M., tekhn.red.~~

[Instructions for plumbing in winter] Ukazaniia po proizvodstvu
sanitarno-tekhnicheskikh rabot v zimnee vremia (U 155-56/VSPMKhP).
Moskva, Gos.izd-vo lit-ry po stroit. i arkhitekt., 1957. 36 p.
(MIRA 11:6)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye sanitarno-
tekhnicheskogo montazha. 2. Montazhnyy otdel Gosudarstvennogo
proyektnogo instituta Santekhproyekt Glavsaantekhmontazha
Minmetallurgkhimstroya SSSR (for Lisitsin, Fishman)
(Plumbing--Cold weather conditions)

LISITSYN S.N.

DUBROVNIK, S.D., inzhener; LISITSYN, S.N., inzhener; ZHURAVLEV, B.A., inzhener;
SMIRNOVA, A.P., red.izdatel'stva; GUSEVA, S.S., tekhn.red.

[Welded plumbing systems] Svarnye sanitarno-tekhnicheskie sistemy.
Moskva, Gos.izd-vo lit-ry po stroit.i arkhitekt., 1957. 105 p.

(MIRA 10:12)

(Welding)

(Plumbing)

KARASEV, A.P., inzh.; LISITSYN, S.N., inzh.; MAZO, A.V., inzh.;
ADAMOV, O.V., inzh., red.; GELIN, M.M., inzh., red.;
MUNITS, A.P., red.izd-va; LAGUTINA, I.M., tekhn.red.

[Standard technological designs for the plumbing of
interior cold and hot water-supply and sewerage systems]
Tipovye tekhnologicheskie karty na proizvodstvo rabot
po montazhu sistem vnutrennego kholodnogo i goriachego
vodosnabzhenia i kanalizatsii. Moskva, Gos.izd-vo lit-ry
po stroit., arkhitekt. i stroit.materialam, 1958. 43 p.

(MIRA 12:9)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam
stroitel'stva. 2. Montazhnyy otdel Gosudarstvennogo pro-
yektного instituta Santekhproyekt (for Karasev, Lisitsyn, Mazo).
(Plumbing--Standards)

LISITSIN, Sergey Nikolayevich, inzh.; SKVORISOVA, I.P., red. izd-va;
PERSON, M.M., tekhn. red.

[New types of fastenings for electric installations, plumbing and
construction work] Novye tipy krepleni dlia elektromontazhnykh,
sanitarno-tekhnicheskikh i stroitel'no-montazhnykh rabot. Moskva,
Gos. izd-vo lit-ry po stroit., arkhitekt. i stroit. materialam, 1958.
85 p. (MIRA 11:7)

(Fastenings)

ZHURAYLEV, Boris Alekseyevich.; LISITSYN, Sergey Nikolayevich.; BALASHOV,
A.I., nauchnyy red.; NINNYAYETS, D.K., red. izd-va.; GILSON, P.G.,
tekhn. red.

[Manual on the installation of piping in shops] Spravochnik po
montazhu vnutritsekhovykh truboprovodov. Moskva, Gos. izd-vo lit-ry
po stroit., arkhitekt. i stroit. materialam, 1958. 219 p. (MIRA 11:12)
(Pipe, Steel)
(Pipe fitting)

ZHURAVLEV, Boris Alekseyevich; LISITSYN, Sergey Nikolayevich;
VINOGRADOV, A.Ya., nauchnyy red.; PAKHOMOVA, M.A., red.
izd-va; GILSON, L.G., tekhn.red.

[Handbook for master plumbers] Spravochnik mastera-
santekhnika. Izd.2., perer. Moskva, Gos.izd-vo lit-ry po
stroit., arkhitekt. i stroit.materialam, 1959. 328 p. (MIRA 12:7)
(Plumbing--Handbooks, manuals, etc.)

LISITSIN, S.N.

New type of spigot and socket joints for cast iron pipes.
Vod. 1 san.tekh. no.1:38-39 Ja '59. (MIRA 12:1)
(Plumbing)

LISITSYN, Sergey Nikolayevich, inzh.; SKVORTSOVA, I.P., red.isd-va;
NAUMOVA, G.D., tekhn.red.

[New types of fastenings for electric installations, plumbing,
and construction work] Novye tipy kreplenii dlia elektro-
montashnykh, sanitarno-tekhnicheskikh i stroitel'no-montashnykh
rabot. Izd.2., perer. i dop. Moskva, Gos.izd-vo lit-ry po
stroit., arkhitekt. i stroit.materialam, 1960. 102 p.

(MIRA 13:11)

(Fastenings)

ZHURAVLEV, Boris Alekseyevich; LISITSYN, Sargey Nikolayevich; FRIDLYAND,
A.Sh., inzh., ratsenzent; RYBAKOVA, V.I., inzh., red.; SOKOLOVA,
T.F., tekhn.red.

[Sheet steel workers handbook] Spravochnik zhestianshchika.
Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960.
326 p. (MIRA 13:6)
(Sheet steel) (Metalwork)

LISITSYN, S.M.

Ways of automatizing work in the pipe industry. Vod.i san.tekh.
no.3:25-27 Mr '60. (MIRA 13:6)
(Pipe cutting) (Screw cutting)

LISITSYN, S.N., inzh.

New connections for ventilation air conduits. Vod. 1 san. tekhn. no.9:36-37
S '63. (MIRA 17:2)

GUBINA, A.A.; ZAKCEYM, Ye.N.; ZUSMANOVICH, V.M.; IVANOV, K.N.;
LISITSYN, S.N.; MOZGOV, A.Ya.; PAVLOV, A.S.; PISKORSKIY,
B.N.[deceased]; USHMIRSKAYA, A.I.; FINKEL'SHTEYN, S.M.;
CHISTOVSKIY, V.B.; SHER, S.Yu.; ADAMOV, O.V., nauchn. red.;
BEYZERMAN, A.N., nauchn. red.; ZHIVOV, M.S., nauchn. red.;
POGORELYY, P.P., nauchn. red.; STAROVEROV, I.G., nauchn. red.;
STESHENKO, A.L., nauchn. red.; TSEYTLIN, M.M., nauchn. red.;
KOKHANENKO, N.A., inzh., red.; VOLNYANSKIY, A.K., glav. red.

[Assembling interior sanitary equipment] Montazh vnutren-
nikh sanitarno-tekhnicheskikh ustroystv. Moskva, Stroiizdat,
1964. 725 p. (MIRA 17:8)

LISITSYN, S.Y.

Unit for reprocessing scutching waste and low-grade flax. Obm. tech.
opyt. [MLP] no.4:12-13 '56. (MIRA 11:10)
(Textile machinery)

CHERKASHIN, Vasilii Ivanovich; LAVRUKHIN, Anatoliy Mikhaylovich;
KUZNETSOV, N.S., inzh., red.; LISITSYN, S.V., inzh., red.;
SOMOVA, T.M., inzh., red.vypuska; DUGINA, N.A., tekhn.red.

[Advanced laying-out methods in metal cutting] Peredovye
metody razmetki v instrumental'nom dele. Moskva, Gos.nauchno-
tekhn.izd-vo mashinostroit.lit-ry, 1960. 53 p. (Biblioteka
razmetchika, no.10). (MIRA 14:2)
(Laying out (Machine-shop practice))

MOGIL'NTY, Iona Minayevich, kandidat tekhnicheskikh nauk, dotsent; LISTSYN,
S.V., inzhener, retsenzent; LEUTA, V.I., inzhener, redaktor; HUDEN-
SKII, Ya.V., tekhnicheskii redaktor.

[Mechanical drawing] Tekhnicheskoe cherenie. Izd. 4-oe, perer. i
dop. Kiev, Gos.nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956.
391 p. (Mechanical drawing) (MLRA 9:5)

MOGIL'NYY, Iona Minayevich, dots., kand. tekhn. nauk; LISITSIN, S.V., inzh.,
retsensent; LEUTA, V.I., inzh., red.; RUDENSKIY, Ya.V., tekhn.
red.

[Mechanical drawing] Tekhnicheskoe cherchenie. Izd.5., perer. i
dop. Kiev, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry,
1958. 391 p. (MIRA 11:9)

(Mechanical drawing)

LISITSYN, S.V.; SHMULEVICH, A.G.

Movable prism for marking operations. Mashinostroitel' no.9:18
S '59. (MIRA 13:2)

(Marking devices)

VINOGRADOV, Boris Vladimirovich; LISITSYN, S.V., inzh., red.; KUZNETSOV,
N.S., inzh., red.; GAVRILOV, P.G., kand.tekhn.nauk, red.;
SOMOVA, T.M., inzh., red.isd-va; DUGINA, N.A., tekhn.red.

[Dimensions and layout of parts in the manufacture of machinery]
Razmery i razmetka detalei v mashinostoreni. Moskva, Gos.nauchno-
tekhn.isd-vo mashinostroit.lit-ry, 1960. 84 p. (Biblioteka raz-
metchika, no.13).
(Laying out (Machine-shop practice))

MOGIL'NIY, Iona Minayevich, dotsent, kand.tekhn.nauk; LISITSYN, S.V..
inzh., retsenzent; MAYEVSKIY, V.V., inzh., red.

[Mechanical drawing] Tekhnicheskoe cherchenie. Izd.6., perer.
i dop. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry.
1960. 418 p. (MIRA 13:7)

(Mechanical drawing)

NEDRIGAYLOV, V., inzh.; GIMEYN, S.; LISITSYN, V.; LEBEDEV, Yu.; POGONIN, A.;
POTAPOV, P.

Technical information. Okhr. truda i sots. strakh. 6 no.7:41-46
Jl '63. (MIRA 16:10)

1. Starshiy inzh. laboratorii tekhniki bezopasnosti Gosudarstvennogo vsesoyuznogo nauchno-issledovatel'skogo tekhnologicheskogo instituta remonta i ekspluatatsii mashinno-traktornogo parka (for Gimeyn).
2. Tekhnicheskiy inspektor Yaroslavskogo soveta professional'nykh soyuzov (for Potapov).

LISITSYN, V.D., kandidat tekhnicheskikh nauk.

Calculation of forces in cold [thread] profile knurling with two rollers.
Vest.mash. 33 no.11:74-77 N '53. (MIRA 6:12)

(Screw-cutting machines)

LISITSYN, V. D.

USSR/ Engineering - Metal machining

Card 1/1 Pub. 128 - 7/25

Authors : Lisitsyn, V. D., Cand. Techn. Sc.

Title : About certain technological parameters of the cold knurling process

Periodical : Vest. mash. 35/4, 30-34, Apr 1955

Abstract : Several methods are given for approximate determination of certain technological parameters of the process of cold knurling of profiles (threads) by means of two rollers. The technological parameters are listed as: knurling force, angle of overlapping, ratio between the diameter of the roller and the diameter of the billet, external friction coefficient, radial feed of the roller, peripheral velocity of rollers and billet and ratio between rate of feed and peripheral velocity of rollers. Mathematical formulas for the determination of these parameters are included. Three USSR references (1947-1953). Tables; graphs; drawings.

Institution :

Submitted :

LISITSYN, V.D., kandidat tekhnicheskikh nauk.

Simple method of calculating cold knurling operations. [Izd.] LONI-
TOMASH vol.40:72-80 '56. (MLRA 10:4)
(Rolling (Metalwork))

LISITSYN, V. D.

137-58-3-5082

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 89 (USSR)

AUTHORS: Mozheyko, Yu. P., Chizhov, S. G., Filina, I. S.,
Lisitsyn, V. D.

TITLE: Automation of Cold-stamping Processes (Opyt avtomatizatsii
kholodnoshtampovoknykh protsessov)

PERIODICAL: V sb.: Kuznechno-shtampovokhn. proiz-vo. Leningrad,
Lenizdat, 1957, pp 165-176

ABSTRACT: Description of automatic punches, automatic presses, and
an automatic production line; their adoption promoted an in-
crease in labor productivity and resulted in a reduction of
manufacturing costs..

Ye.L.

Card 1/1

LISITSYN, V.D.

AUTHOR:

LISITSYN, V.D.

TITLE:

The Determination of the Microhardness of Metal at the Moment of its Stressed-Deformed State. (Opredeleniye mikrotverdosti metalla v moment yego napryazhenno-deformirovannogo sostoyaniya, Russian)

PERIODICAL:

Zavodskaya Laboratoriya, 1957, Vol 23, Nr 6, pp 711 - 715 (U.S.S.R.)

ABSTRACT:

The strength of metal is determined by means of the PMT - 3 apparatus, which makes it possible to deform the samples and to measure the deforming force. In this way steel-, aluminum-, and brass samples were examined. The samples were purified by electric polishing of their surface, after which their microstructure was determined. In order to obtain a uniform structure and hardness, the samples were subjected to thermal treatment. The most frequent parameters for the determination of stressed-deformed states are:
 $\xi_1 \dots$ - intensity of actual main deformation,

$\sigma_1 \dots$ - intensity of real stresses. The amount of deformation intensity was determined by means of the mathematical treatment of the net of coordinates which was placed upon the metal surface according to FRIEDMANN's method. The real stress σ_1 was determined by means of the general diagrams of hardening which were ascertained experimentally. The method of measuring the hardness

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The Determination of the Microhardness of Metal at the Moment of its Stressed-Deformed State. 32-6-24/54

of metal consisted in measuring the microhardness of the grains of the most plastic structural components. For brass grains of a hard α -brass solution, for steel the ferrite- and austenite grains were measured. In order to be able to compare the hardness of the deformed grains with metal hardness at the beginning, it was necessary to determine the microhardness of the grains before deformation with the greatest possible accuracy. The measuring results for stressed metals are:

	aluminum	22 kg/mm
	α -brass	70 kg/mm
	ferrite	98 kg/mm
	austenite	162 kg/mm
for unstressed metal:	austenite σ_p	132 kg/mm
	ferrite σ_p	84 kg/mm
	α -brass σ_p	92 kg/mm
	aluminum P_{σ}	29 kg/mm

Compression: The curves of the modification of the microhardness of compressed metals are graphically plotted and show that in a stressed state the metals have greater strength.

Bending: The analysis of measurements shows that metal hardness is increased by compression whereas it is decreased by tensional stress.

Card 2/3

The Determination of the Microhardness of 32-6-24/54
Metal at the Moment of its Stressed-Deformed State.

ASSOCIATION: Not given
PRESENTED BY:
SUBMITTED:
AVAILABLE: Library of Congress

Card 3/3

ZUBTSOV, Mikhail Yefimovich, dotsent, kand.tekhn.nauk; NORITSYN, I.A., prof.,
doktor tekhn.nauk, retsenzent; NEDOREZOV, V.Ye., kand.tekhn.nauk,
retsenzent; LISITSIN, V.D., dotsent, kand.tekhn.nauk, red.; KUSHLYU,
Ye.S., red.izd-va; POL'SKAYA, R.G., tekhn.red.

[Die stamping] Listovaia shtampovka. Moskva, Gos.nauchno-tekhn.
izd-vo mashinostroit.lit-ry, 1958. 459 p. (MIRA 12:3)
(Sheet-metal work)

AUTHORS: Lisitsyn, V. D., Mozheyko, Yu. P. SOV/119-58-8-3/16

TITLE: An Automatic Line for the Production of Relay Contact Springs by Cold Punching (Avtomaticheskaya liniya dlya izgotovleniya releynykh kontaktnykh pruzhin kholodnoy shtampovkoy)

PERIODICAL: Priborostroyeniye, 1958, Nr 8, pp. 11-15 (USSR)

ABSTRACT: In the "Krasnaya Zarya" Works (Leningrad) an automatic line for the production of relay contact springs of all types and sizes was constructed and put into operation. The technical data are as follows:

Total number of presses	13
distance between operating positions	228 mm
step of transporting device	114 mm
power of head-press	8 t
power of operative press	1,5 t
total number of electromotors	2
total power output of electromotors	3,4 KW
working cycle of the line	0,77 sec
computed output per shift	33000 springs
length of the machine	4,2 m

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SOV/119-58-8-3/16

An Automatic Line for the Production of Relay Contact Springs by
Cold Punching

width of the machine	0,985 m
height of the machine	1,650 m
weight of the machine	1,6 t

By using this line it was possible to reduce the operating staff one tenth of its former number. The working space needed is now only 52 m³ (formerly 208 m³), and only one twelvth of the former amount of electric energy is now used.

Detailed drawings of the following parts are given:

1) plan of punching, 2) general survey, 3) kinematic scheme, 4) cyclogram and graph of operation, 5) a view showing the mechanical introduction of the silver wire, 6) total view of the punch used for the forming of silver contacts.

There are 9 figures.

1. Springs--Production 2. Electric relays--Equipment 3. Industrial
production--Statistical analysis

Card 2/2

AUTHOR: Lisitsyn, V.D.

32-24-4-42/67

TITLE: ~~On the Connection Between the Macro- and Microhardness of Metals~~
(O svyazi mezhdu makro- i mikrotverdest'yu metallov)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 4, pp. 467-470 (USSR)

ABSTRACT: It is stated that the values of macrohardness determined according to the methods developed by Vickers and Brinell practically coincide in the interval of 400-450 kg/mm². Investigations of the problem mentioned in the above title were carried out with undeformed and cold-deformed metal. The methods of determination are based upon the law of analogy $P = a \cdot d^n$, where a and n are constants which are characteristic of the working of the metal. Basing upon geometric and physical-mechanical considerations the logarithm of the above formula is taken and a linear function for a certain range of stress for measurements carried out according to Vickers and also according to Brinell was determined. The determinations of hardness were carried out according to the two aforementioned methods and PMT-3 on pre-polished metal samples of aluminum, brass, and several kinds of steel. From diagrams given it may be seen that in homogeneous metals and alloys the values of macro- and micro-

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On the Connection Between the Macro- and
Microhardness of Metals

32-24-4-42/67

hardness coincide, in which case $n = 2$ may be assumed, but this is the case only up to a certain stress limit. If the impression-diagonal is less than 30μ , the hardness of the metal increases and the law of analogy becomes invalid. In heterogeneous alloys no direct connection between macro- and microhardness can be determined, but $n = 2$ may be put as an approximation, and, on the other hand, determinations can be carried out by way of separate nomograms. Stress- and deformation functions were determined by the method developed by G.A.Smirnov-Alyayev (Ref 10) and were graphically represented. A method of determining average microhardness as compared with the value of macrohardness according to Vickers and Brinell for granulations below 30μ is given. It is said that, instead of the apparatus FMT-3, a more universal device, similar to the micro-tester of the Otto Vol'pert Works must be developed. There are 5 figures, 1 table, and 10 references, 6 of which are Soviet.

ASSOCIATION: Leningradskiy voyenno-mekhanicheskiy institut (Leningrad
Military Technical Institute)

1. Metals---Mechanical properties
2. Hardness---Measurement
3. Metals---Test methods

Card 2/2

5(4)

AUTHOR: Lisitsyn, V. D.

SOV/32-24-12-28/45

TITLE: Determination of the Degree of Local Deformation From
the Micro Hardness (Opredeleniye stepeni lokal'noy
deformatsii po mikrotverdosti)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 12,
pp 1490 - 1494 (USSR)

ABSTRACT: The dependence of the micro hardness of metallic
materials upon the stress was investigated. On the basis
of theoretical and experimental data several conditions
were developed which make the determinations mentioned
in the title possible with small low testing loads. The
values of the hardness according to Vickers were
calculated by an equation (1), which showed after
several modifications of the findings that the micro
hardness of the metal depends not only upon the size
of the impression but also upon the testing load P.
From further deductions and a diagram showing the
micro hardness as a function of the value of n
(Armco-ferrite and α -brass L.68) (Fig 1) it is

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Determination of the Degree of Local Deformation From the Micro Hardness SOV/32-24-12-28/45

apparent that the micro hardness decreases from infinity to zero in relation to n . In determinations of the true micro hardness the values for n must be less greater than 2 with impressions below 30 μ . Measurements were carried out on the PMT-3 apparatus, and with a determination of the coefficients n it was observed (Fig 2) that n also depends upon the kind of material tested. By a particular experimental method diagrams for the determination of the coefficients n as a function of the intensity of deformation were obtained (Fig 3), whereby according to the micro hardness and the character of the micro-structure the degree of local deformation of single metal particles can be determined over a small working range. There are 4 figures and 5 references, 2 of which are Soviet.

Card 2/2

IVANOV, A.P.; LISITSYN, V.D.; YEKIMOV, K.K.

Scientific conference on modernization and operation of forging
and pressing machinery in Leningrad. Kuz.-shtam.proizv. 1 no.3:
47-48 My '59. (MIRA 12:10)
(Forging machinery) (Power presses)

ZUBTSOV, Mikhail Yefimovich, dotsent, kand.tekhn.nauk; ~~LISITSYN, V.D.~~
dotsent, kand.tekhn.nauk, red.; GVIRTIS, V.L., tekhn.red.

[Increasing the durability of dies for cold die stamping]
Povyshenie stoikosti shtampov dlia kholodnoi shtampovki.
Leningrad, 1960. 83 p. (MIRA 14:3)
(Dies (Metalworking)) (Sheet-metal work)

LISITSYN, V D.

PHASE I BOOK EXPLOITATION

SOV/5658

Ivanov, Aleksandr Petrovich, Candidate of Technical Sciences, and
Viktor Dmitriyevich Lisitsyn, Candidate of Technical Sciences,
eds.

Modernizatsiya kuznechno-shtampovochnogo oborudovaniya (Moderni-
zation of Die-Forging Equipment) Moscow, Mashgiz, 1961. 226 p.
Errata slip inserted. 10,000 copies printed.

Reviewer: V. Ye. Nedorezov, Candidate of Technical Sciences; Ed.
of Publishing House: T. L. Leykina; Tech. Ed.: A. A. Bardina;
Managing Ed. for Literature on Machine-Building Technology
(Leningrad Department, Mashgiz): Ye. P. Naumov, Engineer.

PURPOSE: This book is intended for foremen, machinists, designers,
and process engineers concerned with the modernization and de-
signing of die-forging equipment. It may also be used by students
at schools of higher education.

COVERAGE: The book contains material presented at the Conference

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Modernization of Die-Forging Equipment

SOV/5658

on Problems in the Modernization and Operation of Die-Forging Equipment, held in November 1958 in Leningrad. The Conference was called by Leningradskiy Sovet narodnogo khozyaystva, Sektsiya obrabotki metallov davleniyem Leningradskogo oblastnogo pravleniya NTO Mashprom (Leningrad Council of the National Economy, Section of Metal Pressworking at the Leningrad Oblast Board of the Scientific and Technical Society of the Machine Industry) and Leningradskiy mekhanicheskii institut (Leningrad Mechanical Engineering Institute). Actual problems in the modernization, operation, and repair of die-forging equipment are described. Analyses are provided for problems involved in the mechanization and automation of die-forging and stamping operations. Also included are practical data to be used in the modernization of equipment. No personalities are mentioned. There are 59 references: 56 Soviet, 2 German, and 1 English.

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Modernization of Die-Forging Equipment

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3. Methods and means for the experimental investigation of
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Candidates of Technical Sciences)

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VK/wrc/ec
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opytom. Seriya: Goriachaiia i kholodnaia obrabotka metallov
davleniem, no.1) (MIRA 15:3)
(Drawing (Metalwork))—Equipment and supplies

MOSIN, Fedor Vasil'yevich; ROMANOVSKIY, V.P., kand. tekhn. nauk,
retsenzent; LISITSYN, V.D., kand. tekhn. nauk, red.;
VARKOVETSKAYA, A.I., red. izd-va; SHCHETININA, L.V., tekhn.
red.

[Technological processes for the manufacture of articles from
pipe] Tekhnologiya izgotovleniya detalei iz trub. Moskva,
Mashgiz, 1962. 171 p. (MIRA 15:4)
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nauk, red.; KUREPINA, G.N., red.; BARDINA, A.A., tekhn. red.

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FILIPPOV, Viktor Vasil'yevich; SHEKHTER, Viktor Yakovlevich; OLENEV, Vladimir Ivanovich; ROMANOVSKIY, I.P., kand. tekhn. nauk, red.;
LISITSYN, V.D., kand. tekhn. nauk, red.; KUREPINA, G.N., red.
izd-va; BARDINA, A.A., tekhn. red.

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R.Kh., red.izd-va; BELOGUROVA, I.A., tekhn. red.

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sharnirnymi matritsami. Leningrad, 1963. 20 p. (Lenin-
gradskii dom nauchno-tekhnicheskoi propagandy. Obmen pere-
dovym opytom. Seriya: Goriachaia i kholodnia obrabotka me-
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nauk, red.

[Increasing the forgeability of thin-sheet] Povyshenie
shtampuemosti tonkolistovoi malouglerodistoi stali dlia
vytiazhki. Leningrad, 1964. 13 p. (MIRA 18:1)

PERVITSKIY, Yu.D.; GEVONDYAN, T.A., doktor tekhn. nauk, prof.,
retsenzent; DMITRIYEV, F.S., kand. tekhn. nauk, dots.,
red.; LISITSYN, V.D., kand. tekhn. nauk, dots.

[Design and construction of precision mechanisms] Raschet
i konstruirovaniye tochnykh mekhanizmov. Moskva, Mashino-
stroenie, 1965. 547 p. (MIRA 18:7)

L 44356-66 EWT(m)/EWP(k)/EWP(t)/ETI IJP(c) JH/JD/HW
ACC NR: AP6013482 SOURCE CODE: UR/0182/65/000/012/0020/0023

AUTHOR: Lisitsyn, V. D.; Andreyeva, V. N.; Tyanutov, A. G.

ORG: none

TITLE: Experimental study of the drawing of box shapes

SOURCE: Kuznechno-shtampovochnoye proizvodstvo, no. 12, 1965, 20-23

TOPIC TAGS: rimmed steel, brass, oscillograph, metal drawing, pressure measurement,
metal press / 10kp rimmed steel, L62 brass, AD aluminum, MPO-2 oscillograph

ABSTRACT: The article presents the results of an experimental investigation of the drawing of box shapes of various materials: 10kp rimmed steel, L62 brass and AD aluminum, performed with the object of determining the drawing pressure and blankholder pressure as a function of punch stroke and time. The experiments were carried out in an industrial 65-ton drawing press on recording the stresses and pressures with the aid of wire strain gauges and an MPO-2 oscillograph. Analysis of the obtained oscillograms made it possible to determine the maximum drawing pressures for various drawing coefficients m_c as well as the blankholder and edge-trimming pressures. As exemplified by the drawing of brass boxes (Fig. 1), during

UDC: 621.983.3

Card 1/4

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ACC NR: AP6013482

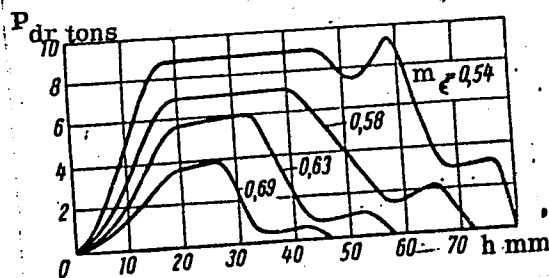


Fig. 1. Experimental curves of drawing pressure P_{dr} during the drawing of brass boxes

the initial part of the forming process the curves of drawing pressure rise steeply; this corresponds to the period of travel of the punch from its initial position to a position at which the centers of curvature of the punch and die coincide in the horizontal. The variation in kinematic and dynamic parameters in the course of the drawing of box shapes was analyzed by plotting combined curves of drawing pressure, blankholder pressure, punch travel and punch stroke (Fig. 2). Initially, as the draw punch encounters the blank, the continuity of motion of the press slider gets disturbed and its velocity sharply decreases. At the moment of impact of the punch

Card 2/4

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ACC NR: AP6013482

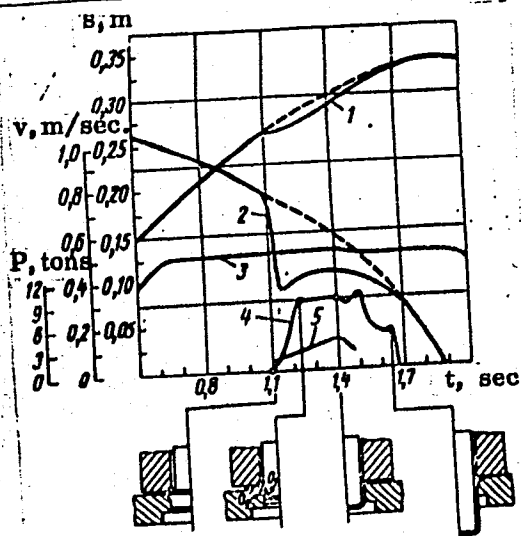


Fig. 2. Combined curves of variation in kinematic and dynamic parameters during the drawing of box shapes:
1 - punch travel; 2 - punch velocity; 3 - blankholder travel; 4 - drawing pressure; 5 - blankholder pressure

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ACC NR: AP6013482

against the blank the press slider bounces upward or halts abruptly. Following the selection of a clearance suited to the design and service life of the press, the slider resumes its descent; then the sine-wave pattern of variation in the path, velocity and acceleration of the slider during drawing is also disturbed. Orig. art. has: 7 figures, 2 tables, 3 formulas.

SUB CODE: 13, 11/ SUBM DATE: none/ ORIG REF: 008/

Card 4/4 hs

LISITSYN, V.G.

Using industrial methods in making and assembling large-block
manifolds. Nov. tekhn. mont. i spets. rab. v stroi. 21 no.8:11-12
Ag '59. (MIRA 12:10)

1. Stroitel'no-montazhnoye upravleniye No.6 tresta Neftekhimmontazh
Minustroya RSFSR.
(Petroleum industry--Equipment and supplies)

LISITSYN V. I.

ORLOV, V.P., kand.sel'skokhoz.nauk. Prinimali uchastiye: AVROV, N.N.;
BASENKO, P.V.; VARLAMOV, D.A.; VASIL'YEV, I.I.; VLASOV, V.N.;
VYLEGZHANINA, V.A.; ZHIVET'YEV, V.G.; ZAVADSKIY, I.S.; ZALESSKIY,
Ye.Ya.; ZAKORYUKIN, D.S.; ISHCHENKO, I.N.; KACHIBAYA, I.D.; KISE-
LEV, Ye.S.; KOZHEVNIKOV, I.Z.; LISITSYN, V.I.; MESHCHERYAKOV, V.F.;
NYURIN-VERTSBERG, R.L.; PEREPELTSYA, V.M.; RYABKOV, A.D.; SKURIKHIN,
I.P.; SOLOV'YEV, N.A.; YAS'KO, N.G.. GREBTSOV, P.P., red.; ZUBRILINA,
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SOSNOVSKIY, Mikhail Vasil'yevich, kand.tekhn.nauk,dotsent;
LISITSYN, Valentin Ivanovich, aspirant

Use of digital computers in processing field data on the choice
of the length of the longwall in the Donets Basin. Izv.vys.
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politekhnicheskogo instituta.

L 10102-02 ENT(a)/EPF(c)/EPR/EWP(j)/T/EWA(h) Pc-4/Pr-4/Ps-4/Peb RPI
ACCESSION NR: AP4045843 WW/RM S/0064/64/000/009/0665/0667

AUTHOR: Antonov, I. S.; Lisitsyn, V. M.; Stasinevich, D. S. Tsekhanskiy,
V. V.; Polyakova, N. Ya.

TITLE: A method of obtaining methylborate

SOURCE: Khimicheskaya promy'shlennost', no. 9, 1964, 665-667

TOPIC TAGS: methylborate, methylborate manufacture, methylborate continuous
synthesis, azeotropic mixture, methylborate extraction, mineral oil, methylbor-

ABSTRACT: A new procedure applicable to manufacturing conditions for ob-
taining methylborate is described. The process involves the synthesis of methylborate
from boron trifluoride and methanol. The separation of the
azeotropic mixture starts at 54C; this contains about 75% methylborate. Methyl-
borate is isolated from the azeotropic mixture by extraction with dry mineral oil.

Card 1/2

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ACCESSION NR: AP4045843

and evaporated at 200C. Continuous synthesis requires continuous feeding, separation of the azeotropic mixture and addition of warm steam, the latter being added automatically upon decrease of pressure in the synthesis column. The methanol is separated by distillation and the methanol is recycled. The methanol is separated by distillation and the methanol is recycled.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: GC, MT, IC

NO REF SOV 000

OTHER 006

Card 2/2

LISITSYN, V. M.

Lisitsyn, V. M.

"Investigation of the operation and selection of reservoirs of surplus recuperation energy on electrified railroad lines." Min Railways USSR. Moscow Order of Lenin and Order of Labor Red Banner Inst of Railroad Transport Engineers imeni I. V. Stalin. Moscow, 1956. (Dissertation for the Degree of Candidate in Technical Sciences.)

Knizhnaya letopis'

No. 25, 1956. Moscow

LISITSYN, V.M., kandidat tekhnicheskikh nauk.

Receivers for excess regenerative power. Trudy MIIT no.90/13:27-
45 '56. (MLBA 10:4)

(Electric railroads--Brakes)

LISITSYN, V.M., kand.tekhn.nauk

Increasing the reliability and economy of recuperative braking.
Zhel.dor.transp. 40 no.11:62-64 N '58. (MIRA 11:12)
(Electric railroads--Brakes)

BENKSHCHEVICH, Ivan Ivanovich; LISITSYN, Viktor Mikhaylovich; SIDOROV, N.I.,
inzh., red.; BOBROVA, Ye.N., tekhn.red.

[Principles of automatic and remote control on electric rail-
roads] Osnovy avtomatiki i telemekhaniki elektricheskikh zhe-
leznykh dorog. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va
putei soobshchenia, 1960. 273 p. (MIRA 14:1)

(Electric railroads--Equipment and supplies)
(Automatic control) (Remote control)

Card 4/4

irradiation intensities show that Sr impurities can increase the generation of anion vacancies by several times. Orig. art. has: 5 formulas, figure, and 1 table. [JA]

ACC NR: AP6036814

SOURCE CODE: UR/9368/66/005/005/0683/0685

AUTHOR: Lisitsyn, V. M.;

ORG: none

TITLE: The effect of alkali earth impurities on the accumulation rate of color centers in alkali halide crystals irradiated with protons

SOURCE: Zhurnal prikladnoy spektroskopii, v. 5, no. 5. 1966, 683-685

TOPIC TAGS: color center, irradiation, irradiation effect, proton bombardment, crystal impurity, *alkali halide*

ABSTRACT: The kinetics of the accumulation of F-centers in KCl and KBr crystals having different amounts of Sr impurity is investigated. Crystals in which the halides could be replaced by cation vacancies at 195K were irradiated with protons accelerated in the TPI cyclotron up to 6.5 Mev. Absorption spectra were measured with the SF-4 spectrometer. Irradiation and measurements were carried out at room temperature. The presence of the Sr impurity in KCl and KBr crystals increases the rate of F-center accumulation in the first stage. The rate of F-center accumulation in the second stage (which depends basically on the F-centers produced on vacancies generated by radiation) increases by 2 to 5 times in comparison with pure crystals. In pure KCl crystals, the rate of accumulation of M-centers increases when the irradiation dose increases. In KCl crystals doped with Sr, the rate of accumulation of M-centers

Card 1/2

UDC: 539.104

ACC NR: AP6036814

increases in the initial period of irradiation. At large irradiation doses, the accumulation rate of M-centers is smaller than in pure crystals. Orig. art. has: 2 figures. [WA-95]

SUB CODE: 20/ SUBM DATE: 25Jan65/ ORIG REF: 005/ OTH REF: 006

Card 2/2

1314 3/11/61
Distr: 4E4j/4E3d/4E2c(j)

7
(Transformation of xylenes over aluminosilicate catalyst

Transformation of 1,3,5-trimethylbenzene

and darent, the hydrocarbons comprising 30% of total products. There are also formed up to 20% neutral compds., b above 185°. Pure 1,3,5-xylene at 350° gave PhOH and isomeric cresols in some volume with high-boiling

1/11

SOV/68-58-11-14/25
AUTHORS: Vorozhtsov N.N., Corresponding Member of the Academy of Science of the USSR, Doctor of Chemical Science, Lisitsyn V.N., Candidate of Chemical Science, Agafonov A.V. and Krasivichnev V.V., Candidates of Technical Science, and Abayeva B.T., Candidate of Chemical Science
TITLE: Transformation of Higher Homologues of Phenol into Lower Ones (Prevrashcheniye vysshikh gomologov fenola v nizshiye)
PERIODICAL: Koks i Khimiya, 1958, Nr 11, pp 42-47 (USSR)
ABSTRACT: The results of an investigation on the dealkylation of technical xyleneol with simultaneous alkylation of benzole in a pilot plant of the All-Union Scientific Research Institute of the Petroleum Industry in which bead aluminosilicate was used are described. This was a continuation of the previously published work (Ref 1) on the transformation of xyleneols (on interaction with benzole) into phenols and cresols on cracking under mild conditions on an aluminosilicate catalyst. The experimental plant used (Fig 1) is outlined. It was established that, on passing xyleneol in mixture with benzole

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SOV/68-58-11-14/25

Transformation of Higher Homologues of Phenol into Lower Ones

(1 : 3.65 by weight) over aluminosilicate catalyst at temperatures in the range 300-400°C and volume velocities of 0.42-1.47hr⁻¹, up to 60% (on weight of starting xylenol) of phenolic compounds (phenol, o-, m- and p-cresols, xylenols), including 20-22% of phenolic-cresolic fraction, are obtained. Simultaneously 11-19% of benzene homologues with a boiling temperature of 100-185°C and 13-18% of neutral compounds with boiling temperatures above 185°C are formed. 8-25% of coke is deposited on the catalyst. The influence of the temperature of the reaction, the volume velocity of reactants (Table 1), additions of water vapour and various proportions of benzole (Table 2) on the transformation of xylenol and changes in the activity of the catalyst with time of operation (Table 3) were established. It was found that at temperatures 300-320°C and volume velocities 0.92-1.47hr⁻¹ more phenolic-cresolic fraction and less of neutral compounds and coke on the catalyst is obtained (taking into consideration the transformation of xylenol). At 300°C and a volume velocity 0.92hr⁻¹ 330kg of

Card 2/3

SOV/68-58-11-14/25

Transformation of Higher Homologues of Phenol into Lower Ones

phenolic-cresolic fraction and about 200kg of benzene homologues with a boiling temperature 100-185°C can be obtained from 1 ton of xlenol.

There are 3 tables, 3 figures and 6 references (4 Soviet, 1 English and 1 German)

ASSOCIATION: MKhTI Im. D.I. Mendeleeva, VNII NP

Card 3/3

LISITSYN, V.N.; LEUKOV, V.I.

The IAMZ exhaust-gas analyzers. Avt.prom. no.1:23-25 Ja '59.
(MIRA 12:1)

1. Yaroslavskiy motornyy zavod.
(Automobile exhaust gas--Analysis)

5 (3)

AUTHORS:

Vorozhtsov, N. N. jun., Lisitsyn, V. N. SOV/79-29-7-62/83

TITLE:

On the Conversions of Xylenols Over an Aluminosilicate Catalyst
(O prevrashchenii ksilenolov na alyumosilikatnom katalizatore)
II. Conversions of 1,2,4- and 1,3,4-Xylenols (II. Prevra-
shcheniye 1,2,4- i 1,3,4-ksilenolov)

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol 29, Nr 7, pp 2382 - 2386
(USSR)

ABSTRACT:

The authors point out in a foot-note that the oxy group is substituted on the 1-carbon atom. Previous studies of Vorozhtsov and Lisitsyn on the effect of the aluminosilicate catalyst on 1,2,4-, 1,3,4-, and 1,3,5-xylenols in benzene at different temperatures and for varying lengths of contact time (Ref 1) showed that a rise in temperature to 350-450° decreases the amount of phenol-cresol fraction in every case, while larger amounts of the neutral compounds with boiling points at 100° and above (including toluene) are obtained and depositions on the catalyst also increase. Lengthening the time of contact has the same effect as a rise in temperature. These results indicate that the conversion of the above xylenols on the aluminosilicate catalyst may proceed differently at 350-450°. The main reactions

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On the Conversions of Xylenols Over an Aluminosilicate SOV/79-29-7-62/83
Catalyst. II. Conversions of 1,2,4- and 1,3,4-Xylenols

are probably disproportionation and isomerization (I) described by American authors for cresols and xylenols in contact with the above catalyst (Ref 2); further the reduction of the phenol homologs (II). The addition of benzene leads to a competitive reaction (III) in which the methyl group of the phenol homolog passes over to the benzene molecule. Similar reactions of alkyl groups of benzene derivatives have been described in publications (Refs 4-8), whereas the authors' present investigation of the reaction of xylenols with benzene indicates the possibility of a methyl group transfer to the benzene molecule from the molecule of a phenol compound. There are 3 tables and 11 references, 7 of which are Soviet.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskii institut imeni D. I. Mendeleeva (Moscow Institute of Chemical Technology imeni D. I. Mendeleev)

SUBMITTED: June 16, 1958

Card 2/2

LISITSYN, Y.N.; BURDASOV, Ye.I.

Investigating the operation of the gas distributing mechanism of
an engine. Avt.prom. no.12:24-26 D '60. (MIRA 13:12)

1. Yaroslavskiy motornyy zavod.
(Automobiles--Fuel systems)

VOROZHTSOV, N.N., LISITSIN, V.N.

Synthesis of 1,5-and 2,6-chloronaphthols. Zhur. ob. khim. 30
no.9:2816-2817 S '60. (MIRA 13:9)

1. Moskovskiy khimiko-tekhnologicheskii institut im. D.I. Mendeleeva.
(Naphthol)

LISITSYN, V.N.; BAKULINA, G.G.; SEDOVA, T.V.; VOROZHTSOV, N.N., mladshiy

Transformation of halogen-containing aromatic compounds in the presence of hexamethylenimine. Part 1: Substitution of a chlorine atom by a hydroxy group in o-chlorocarboxylic acids. Zhur.ob.khim. 32 no.11:3734-3737 N '62. (MIRA 15:11)

1. Moskovskiy khimiko-tekhnologicheskii institut imeni D.I. Mendeleeva.

(Acids, Organic)

(Chlorine compounds)

(Hydroxy compounds)

LISITSYN, V.N.; SMIRNOVA, T.I.

Transformation of halogen-containing aromatic compounds in the presence of hexamethylenimine. Part 2: Substitution of chlorine atom in nitrochlorobenzoic acids. Zhur.ob.khim. 33 no.7:2311-2313 J1 '63. (MIRA 16:8)

1. Moskovskiy khimiko-tekhnologicheskii institut imeni D.I.Mendeleeva. (Benzoic acid) (Chlorine compounds) (Hexamethylenimine)

SUDARIKOV, B.N.; FROLOV, Yu.G.; PUSHKOV, A.A.; LISITSYN, V.N.; IL-ICHEV, V.A.

Some extraction properties of *o*-octylaniline. Trudy MKHTI no. 43:
9-11 '63. (MIRA 19:10)

L 27731-66 EWT(1) WG

ACC NR: AF6013033

SOURCE CODE: UR/0051/66/020/004/0734/0736

AUTHOR: Lisitsyn, V. N.; Chebotayev, V. P.

ORG: none

TITLE: Excitation of helium levels by optical pumping

SOURCE: Optika i spektroskopiya, v. 20, no. 4, 1966, 734-736

TOPIC TAGS: gas laser, helium, metastable state, laser pump, spectral line, line intensity, light absorption

ABSTRACT: The authors present the results of investigations aimed at obtaining population inversion in a helium discharge by optical pumping. Helium was chosen because of the large separation between its spectral lines. The experimental setup consisted of a discharge tube and two pump lamps with an optional liquid filter between them. The tests were made at the optimal conditions (pressure 0.2 mm Hg, discharge current 60 ma) for the population inversion of the levels $3^1P - 3^1D$ ($\lambda = 95 \mu$). Application of the pump light (discharge current through pump tubes 600 ma) increased the population of the 3^1P approximately fourfold. With increasing gas pressure, the population of the 3^1P level decreased. The intensity of the 5015 \AA ($3^1P - 2^1S$) line was found to vary with increasing helium pressure in the discharge like the concentration of the metastable 2^1S helium atoms. Use of a liquid CuSO_4 filter increased the population inversion. An increase in the absorption of the 6678 and 5875 \AA lines was observed as a result of optical pumping, thus evidencing an appreciable increase of the 2^1P and 2^3P levels. Other effects of optical pumping,

Card 1/2

UDC: 621.375.9: 535 + 537.523/.527

L 27731-66

ACC NR: AP6013033

2
which may be of use in the development of gas lasers, are also mentioned. The authors thank I. M. Beterov for participating in the experiment and discussing the results, and G. A. Milushkin for help with the work. Orig. art. has: 1 figure. [02]

SUB CODE: 20/ SUBM DATE: 14 Jun 65/ OTH REF: 003/ ATD PRESS: 5001

Card 2/2 B L G

L 29357-66 EEC(k)-2/EWP(k)/ENT(1)/EVT(m)/FBD/T/EWP(t)/ETI IJP(c) WG/JD
ACC NR: AP6018455 SOURCE CODE: UR/0051/66/020/006/1087/1088

AUTHOR: Lisitsyn, V. N.; Chebotayev, V. P.

ORG: none

TITLE: Generation at the 4f—3d transitions of neon with optical pumping of a helium discharge lamp in an He—Ne mixture

SOURCE: Optika i spektroskopiya, v. 20, no. 6, 1966, 1087-1088

TOPIC TAGS: laser, laser pumping, optical pumping

ABSTRACT: An investigation was made of the use of optical pumping for obtaining generation on high transitions of neon. The laser used in the experiments had external spherical mirrors spaced 2 m apart and an operational tube 9 mm in diameter with a 140-cm discharge length. Two optical pumping lamps, filled with helium at a pressure of 4 mm Hg, were placed along the operational tube. A glow discharge was produced in the He—Ne mixture in the operational tube. The pumping lamps operated in continuous and pulsed regimes (maximum currents 0.6 and 50 amp, respectively). Generation with optical pumping appeared at the 4f—3d Ne transitions with $\lambda = 1.8281$ and 1.8287μ . The maximum generation intensity during pumping was obtained at a pressure of the mixture which was optimum for obtaining population inversion between the 4s—3p

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UDC: 621.375.8 : 535

L 29357-46

ACC NR: AP6018455

Ne levels ($\lambda = 1.15 \mu$). This pressure corresponded to a maximum concentration of the metastable atoms of 2^3S He. Very weak generation on the aforementioned lines was observed without optical pumping at lower pressures of the mixture (pressures which were near the optimum for generation at the $5s-3p$ Ne ($\lambda = 0.63 \mu$) transition). With pulsed optical pumping, a comparatively large amplification produced a generation on 1.8μ with an operational discharge 30 cm long. The generation appearing at the $4f-3d$ transition was followed by an attenuation or breaking away (in the pulsed regime) of the generation on 1.15μ , which was present without pumping. Thus, generation with optical pumping at the $4f-3d$ transitions is due to a stronger population increase of $4f$ Ne levels in comparison with the $3d$ levels. The greater population increase is caused by the reactions $He(2^3S) + h\nu + He(2^3P)$ and $He(2^3P) + Ne(^1S_0) \rightarrow Ne(6s, 5d, \text{etc.}) + He(^1S_0) + \Delta E$. The authors thank G. A. Milushkin for help in the work. Orig. art. has: 2 formulas and 1 figure. [JA]

SUB CODE: 20/ SUBM DATE: 21Dec65/ ORIG REF: 001/ OTH REF: 001
ATD PRESS: 50/0

Card 2/2

L 08188-67 EMP(a)/EWT(m) WH

ACC NR: AP6032931

SOURCE CODE: UR/0288/66/000/002/0156/0158

AUTHOR: Ishchenko, V. N.; Lisitsyn, V. N.ORG: Institute of Semiconductor Physics, Siberian Section AN SSSR, Novosibirsk
(Institut fiziki poluprovodnikov, Sibirskogo otdeleniya AN SSSR, Novosibirsk)TITLE: Generation of ruby at two R-linesSOURCE: AN SSSR. Sibirskoye otdeleniye. Seriya tekhnicheskikh nauk, no. 2, 1966,
156-158

TOPIC TAGS: laser emission, ruby laser

ABSTRACT: In the luminescence spectrum of a ruby there are observed two strong lines at wavelength of 6943 \AA (R_1 -line) and 6929 \AA (R_2 -line). The intensity and the width of the R_2 -line satisfy the condition for generation at a wavelength of 6922 \AA . However, between the sublevels from which the R-lines start, transfer of energy takes place at a speed of the order of 10^{-7} sec; therefore, the induced radiation at the R_1 -line which appears earlier reduces the population of both levels, and the condition for generation at the R_2 -line cannot be satisfied. The present work used a method involving the introduction into the resonator of a dispersing prism, used in gas lasers for tuning the resonator to a determined wavelength. All the measurements were made with a rose ruby 8 mm in diameter and with a length of 50 mm, with two flash bulbs fed

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UDC: 621.375.9

L 08188-67

ACC NR: AF6032931

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by a battery of condensers with a capacitance of 880 microfarads. The distance between the mirrors was 150 cm. In such a resonance generator, generation at the R_1 line appears at a boosting energy of approximately 1 kilojoule. It is assumed that the losses in the resonator are approximately the same for both lines. Generation at the R_2 -line should then appear at a boosting energy of 1.22 kilojoules, if the induced radiation at the R_1 -line is suppressed. A figure, based on the experimental data, shows the dependence of the luminescence power of the ruby on the pumping energy for the R_1 - and R_2 -lines. The conclusion is drawn that for a ruby crystal of good quality, the region of generation at both lines is substantially narrower, and that there is competition between the R_1 and R_2 lines. "In conclusion, the authors thanks G. V. Krivoshechekov for his interest in the work and V. P. Chebotayev for his valuable advice." Orig. art. has: 4 figures.

SUB CODE: 20/ SUEM DATE: 26Dec64/ ORIG REF: 002/ OTH REF: 004

Card 2/2 dda

MIRONOV, V.A.; LISITSYN, V.S.

New pneumatic power steering mechanism. Avt.prom. no.6:22-23
Je '60. (MIRA 13:8)

1. Yaroslavskiy motornyy zavod.
(Automobiles--Steering gear)

USSR/Engineering - Hydraulic Structures Jan 52

"Sinking Caissons by the Method of Mechanizing
the Inside-Caisson Operations," V. A. Boychuk,
Eng'r, V. V. Lisitsyn

"Gidrotekhn Stroi" No 1, pp 19, 20

Describes procedure for lowering caissons without
workmen inside of caisson chamber, using hydro-
mech method for breaking and removal of ground.
Operation is controlled from booth built over
caisson ceiling and connected outside by open
shaft. Observation over performance of mechanisms

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is done through illuminator in caisson ceiling.
Method was used for sinking 12 caissons 50 sq m
in area, and one 576 sq m caisson during 1949 -
1951 period.

212756

LISITSYN, V. V.

Lisitsyn, Ya. A.

LISITSYN, Ya. A.; FEDOTOVA, V. P.; NOGTEVA, N. Ya.

**Experience in the production of no. 1310 unbleached poplin. Tekst.
prom. 17 no. 9:56-57 S '57. (MIRA 10:11)**

**1. Zaveduyushchiy tkatskim proizvodstvom fabriki Bol'shaya
Ivanovskaya Manufaktura (BIM) (for Lisitsyn). 2. Zaveduyushchiy
laboratoriyey fabriki Bol'shaya Ivanovskaya Manufaktura (for
Fedotova). 3. Nachal'nik prigotovitel'nogo otdela fabriki Bol'shaya
Ivanovskaya Manufaktura (for Nogteva).
(Cotton fabrics)**

Lisitsyn, Ye. A.

99-1-4/10

AUTHORS: Bikus, D.I., Lisitsyn, Yev. A. Plavinskiy, A.I., and Pozdenko, N.I., Engineers

TITLE: Water Supply of Moldavia (Vodnoye khozyaystvo Moldavii)

PERIODICAL: Gidrotekhnika i Melioratsiya, 1958, # 1, pp 19-25 (USSR)

ABSTRACT: The diversity of soil and climatic conditions prevailing in the Moldavian SSR demand intensive application of irrigation as well as drainage. Excellent results were obtained with irrigation at the Scientific-Research Institute for Irrigational Farming. Existing systems were expanded, and several new systems were recently built. At the end of the sixth Five-Year Plan a total of 34,000 ha are to be put under irrigation. According to state plans, 250,000 ha will be irrigated by 1970, at an expenditure of 1,785,000,000 rubles.

The diking and draining of the Dnestr lowlands and the island of Turunchuk, comprising a total of 27,000 ha, was started in 1951. In July 1957, the Moldavian Scientific-Research Institute for Irrigation Farming was established

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Water Supply of Moldavia

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in conjunction with two experimental farms.
There are 7 photographs.

AVAILABLE: Library of Congress

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LISITSYN, YE. O.

~~LISITSYN, YE. O.~~

Osteomyelitis of the squama of the frontal bone in a nine-year-old.
Vest.oto-rin. 20 no.1:99-100 Ja-F '58. (MIRA 11:3)

1. Iz kliniki bolezney ukha, gorla i nosa (zav.-prof. I.I. Shcherbatov) pediatricheskogo fakul'teta II Moskovskogo meditsinskogo instituta.

(OSTEOMYELITIS, in inf. & child
squama of frontal bone (Rus)

(FRONTAL BONE, dis.

osteomyelitis of squama in child (Rus)

LISITSYN, Ye.S.

Stabilizing slopes of roadbeds with chemical substances. Transp. stroi.
14 no.7:38-39 J1 '64. (MIRA 18:1)

1. Rukovoditel' gruppy Moskovskogo gosudarstvennogo proyektno-izyskatel'skogo instituta Gosudarstvennogo proizvodstvennogo komiteta po transportnomu stroitel'stvu SSSR.

RUDAYA, K.I., dotsent; KOSTROMIN, A.M., inzh.; LISITSYN, Ye.V., inzh.

Studying the performance of contactless regulators. Trudy
MIIT no.151:135-152 '62. (MIRA 16:2)
(Diesel locomotives) (Electric controllers)

KOVNER, G.M., dotsent; BORODULIN, I.P., inzh.; LISITSYN, Ye.V., inzh.

Investigating the smooth regulation of the magnetic flux of
the electric traction engines of diesel locomotives. Trudy
MIIT no.151:153-170 '62. (MIRA 16:2)
(Diesel locomotives) (Electric railway motors—Testing)